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# GRAMMATICALIZATION VIA SEMANTIC BLEACHING IN IDIOMATIC CONSTRUCTIONS: A SCIENTOMETRIC APPROACH

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**Abstract:** This scientometric study investigated the evolving intellectual landscape concerning the interplay between grammaticalization and semantic bleaching within idiomatic constructions. To achieve this objective, the study meticulously analyzed a dataset comprising 356 scholarly publications extracted from the Scopus database, spanning the period from 2014 to 2024. The research employed bibliographic data analysis and keyword clustering as primary analytical techniques. Our findings reveal four salient thematic clusters: “theory” (31.62% of notable keywords), “grammaticalization” (30.88%), “corpus & frequency” (29.41%), and “syntax & change” (8.09%). These clusters comprehensively underscore the most notable theoretical frameworks, methodological approaches, and specific linguistic subfields that significantly contribute to this active research area. To some extent, the findings provide a detailed overview of current research and suggest avenues for further investigations, particularly those employing corpus-based methods and incorporating insights from cognitive linguistics and construction grammar to further explore grammaticalization in specific languages, such as Indonesian.

**Keywords:** grammaticalization, semantic bleaching, idiomatic constructions, scientometrics

The dynamic interplay between semantics and grammar has long captivated linguists (e.g., Aikhenvald et al., 2020; Brinton & Traugott, 2017; Heine & Kuteva, 2023; Hopper, 1991; Talmy, 2018; Van Goethem et al., 2018), with the phenomenon of grammaticalization standing as a testament to the intricate evolution of language. Grammaticalization, the process by which lexical items transform into grammatical markers (Narrog & Heine, 2017; Traugott & Trousdale, 2014), often involves a fascinating

semantic shift known as semantic bleaching. This process entails the gradual loss or generalization of meaning as a word transitions from a content-bearing element to a more functional or grammatical role (Giomi, 2023a). This semantic shift is often accompanied by phonological and morphological reduction (Giomi, 2023b), as the word may become shorter or less morphologically complex. Furthermore, the word’s syntactic behavior may change, reflecting its new grammatical function. For

instance, a verb that originally denoted a concrete action might become grammaticalized as an auxiliary verb, expressing grammatical nuances such as tense (in some specific language cases), aspect, or modality. This evolution of form and function highlights the dynamic nature of language (Aikhenvald, 2019b; Amaral, 2018), where lexical items can transcend their original semantic boundaries and become integrated into the grammatical system.

Within the realm of grammaticalization, idiomatic constructions hold a particular fascination. Idioms, with their inherent semantic idiosyncrasies and fixed expressions, provide fertile ground for investigating the complex interplay between lexicalization, semantic change, and grammaticalization (De Belder & Van Koppen, 2016). As idioms become entrenched in language use (Nugraha, 2020), they may undergo semantic bleaching, losing their original figurative meaning and gradually assuming more grammatical functions. This process often involves the reanalysis of the idiom's components, with individual words and phrases taking on new grammatical roles as they become integrated into the larger syntactic system. Moreover, this reanalysis can lead to changes in the idiom's syntactic behavior, such as altered argument structure, fixed word order, or restrictions on co-occurrence with other elements. For instance, an idiom that originally functioned as a verb phrase might become reanalyzed as a preposition or a conjunction, with corresponding changes in its syntactic distribution. This evolution of idiomatic expressions into grammatical markers highlights the forceful interchange between lexicon and grammar, demonstrating how fixed expressions can become integrated into the structural fabric of a language. Furthermore, it underscores the role of usage patterns and cognitive processes in shaping the evolution of idiomatic constructions, as their frequent use and conventionalization can lead to semantic bleaching.

Semantic bleaching, one of the keystone of grammaticalization, involves the attenuation or generalization of a word's meaning as it transitions from lexical to a grammatical function (Bouveret, 2020). This process can be conceptualized within the framework of cognitive linguistics, which emphasizes the role of conceptual structure and metaphor in shaping language. As an idiom undergoes

grammaticalization, its original concrete or imagistic meaning may fade, giving way to a more abstract or schematic representation. This semantic shift often accompanies changes in the idiom's syntactic behavior, reflecting its evolving grammatical role. For instance, a verb with a specific action meaning may become bleached and grammaticalized as an auxiliary verb, expressing grammatical notions like aspect or modality, or even tense in some specific languages, inflectional one. This transition often involves a shift from a concrete, event-oriented meaning to a more abstract, grammatical function. Consider the English verb "go," which originally denoted physical movement but has grammaticalized in certain contexts to express future tense, as in "I am going to visit my grandmother." Similarly, the verb "have" has evolved from its possessive meaning to function as an auxiliary in perfect tense constructions, as in "I have finished my work." Such examples illustrate how semantic bleaching can lead to the emergence of new grammatical categories and constructions, enriching the expressive potential of a specific language.

Furthermore, previous research has explored various facets of grammaticalization and semantic bleaching in diverse languages and linguistic contexts. Studies have investigated the grammaticalization of verbs into auxiliaries, nouns into prepositions, and adverbs into discourse markers, amongst other pathways (e.g., Aikhenvald, 2018; Heine, 2018; Narrog, 2017a; Rhee, 2019). These investigations have shed light on the diverse mechanisms involved in grammaticalization, such as reanalysis, analogy, and extension. Researchers have also explored the role of frequency and context in promoting grammaticalization, demonstrating how repeated use in specific linguistic environments can lead to semantic bleaching and functional change (Ciszek-Kiliszweska, 2014; Rhee, 2017). Furthermore, cross-linguistic comparisons have revealed both universal tendencies and language-specific patterns in grammaticalization pathways (e.g., Alboiu & Hill, 2023; Davidse et al., 2023; Kisiel & Kolyaseva, 2023). These comparative studies have identified recurring semantic and syntactic changes associated with grammaticalization, such as the tendency for verbs to lose agentivity and become auxiliaries, or for spatial prepositions to develop temporal meanings.

However, they have also highlighted the influence of language-specific factors, such as word order typology or the presence of particular grammatical categories, on the precise trajectory of grammaticalization (cf., Ciszek-Kiliszevska, 2016; Kolyaseva & Kisiel, 2023). This research underscores the importance of considering both universal cognitive mechanisms and language-specific constraints when investigating the evolution of grammatical systems. By examining a wide range of language, linguists can gain a deeper understanding of the forces that shape grammatical change and the diverse pathways through which grammaticalization unfolds.

In addition to the previous research areas, corpus-based studies have also provided quantitative evidence for the gradual nature of grammaticalization, documenting the frequency and distribution of linguistic forms as they undergo semantic bleaching and functional shift (Ciszek-Kiliszevska, 2018; Kolyaseva, 2021, 2022). By analyzing large-scale datasets of language use, researchers have been able to track the subtle changes in the usage patterns of grammaticalizing constructions, demonstrating how their frequency, collocational patterns, and syntactic contexts evolve over time. This quantitative approach has provided notable empirical support for the theoretical models of grammaticalization, revealing the incremental nature of semantic change and role of frequency in driving linguistic evolution. Moreover, corpus-based studies have allowed for more precise comparison of grammaticalization phenomena across different languages and dialects, shedding light on the interplay between universal tendencies and language-specific variation.

Despite the numerous of research on grammaticalization and semantic bleaching, there remains a need for a comprehensive overview of the current state of research specifically focused on idiomatic constructions. While existing research has explored various facets of grammaticalization, the particularities of idiomatic expression and their role in language change warrant focused investigation. Idioms, with their inherent semantic complexities and fixed structured, present unique challenges and opportunities for understanding the interplay between lexicalization, semantic change, and

grammaticalization. This study aims to address this gap by employing a scientometric approach to map the intellectual landscape of this research area. Specifically, we aim to answer the following research questions: (1) what are the dominant themes and research trends within the field of grammaticalization via semantic bleaching in idiomatic constructions; and (2) how do these theme cluster together, and what are the key concepts and theoretical frameworks that underpin this research area?

## METHOD

This study employed a scientometric approach to investigate research trends and thematic clusters within the field of grammaticalization via semantic bleaching in idiomatic constructions. Scientometrics, a quantitative analysis of scientific literature, allows for a comprehensive and objective assessment of research activity (Sooryamoorthy, 2020; Waltman & van Eck, 2019), identifying key themes, influential authors, and emerging trends within a specific domain. This methodology is particularly well-suited for mapping the intellectual landscape of a research area (Henneken & Kurtz, 2019; van Raan, 2019), revealing the relationships between different concepts and highlighting areas of focus and potential growth. As illustrated by Figure 1, by combining bibliographic data analysis with keyword clustering techniques, this study aimed to provide a comprehensive overview of the current state of research on grammaticalization and semantic bleaching.

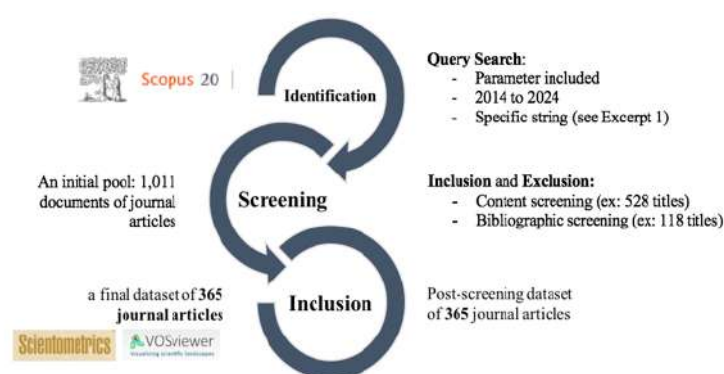
The primary material for this study comprised a carefully curated dataset of 356 journal articles extracted from Scopus, a comprehensive abstract and citation database of peer-reviewed literature. This dataset represents a targeted selection of scholarly publications relevant to the research topic, ensuring the inclusion of articles that specifically address the interplay between grammaticalization, semantic bleaching, and idiomatic constructions. The use of Scopus as the data source ensured access to wide range of international publications, encompassing diverse perspectives and research traditions. The meticulous curation process involved manual screening of the titles, abstracts, and keywords to ensure relevance and

exclude publications that did not directly address the research topic.

The data collection process involved a systematic search of the Scopus database using a combination of keywords and search operators. The search strategy was designed to capture publications that explicitly addressed the core concepts of grammaticalization, semantic bleaching, and idiomatic constructions. Keywords included terms such as “grammaticalization,” “semantic bleaching,”

“idiom,” “idiomatic,” “construction,” and other related variations. Search operators were used to refine the search, ensuring the inclusion of documents that contained all relevant keywords within the title, abstract, or keywords fields. The initial search yielded a larger pool of documents ( $n = 1,011$  documents), which were then subjected to a manual screening process to ensure relevance and exclude publications that did not directly address the research topic.

**Figure 1. A Flowchart of the Current Research Methodology**



The collected data ( $n = 356$  documents) underwent two main types of analysis: bibliographic data analysis and keyword clustering. Bibliographic data analysis involved examining publication trends, author productivity, institutional affiliations, and geographical distribution to identify key contributors and map the overall research landscape. Keyword clustering, performed using VOSviewer (1.6.20) software (van Eck & Waltman, 2023), aimed to identify thematic clusters within the research area by analyzing the co-occurrence patterns of keywords extracted from the dataset. The parameters for keyword clustering were as follows: minimum number of occurrences of a term: 7; of the 7,533 terms, 251 met the threshold; for each of the 251 terms, a relevance score was calculated; based on this score, the 60% most relevant terms were selected (number of terms to be selected: 151); type of analysis: co-occurrence; binary counting method; unit of analysis: all keywords. This analysis revealed distinct clusters, each representing a prominent thematic area within

the research on grammaticalization through semantic bleaching in idiomatic constructions.

## RESULTS AND DISCUSSION

### Results

This scientometric analysis examines the growing body of research on grammaticalization through semantic bleaching in idiomatic constructions, drawing on a meticulously curated dataset of 356 documents extracted from Scopus (2014-2024). Initial findings reveal a steady increase in yearly publications on this topic, highlighting its burgeoning significance within linguistic discourse. A preliminary assessment of publication venues identifies notable publishers as leading outlets for this research. Furthermore, analysis of author keywords and citation networks reveals a concentration of influential work by notable scholars, whose contributions have shaped the theoretical landscape. Preliminary investigation into document affiliations indicates a predominance of research



originating from institutions in many countries, while funding acknowledgements point towards the significant role of sponsor in supporting this research. A thematic analysis of subject areas reveals a strong association with notable disciplines, underscoring the nature of this field. Finally, keyword clustering analysis reveals several prominent thematic clusters, which will be explored in greater detail in subsequent sections of this current paper.

### Yearly Publication

According to our analysis, Figure 2 illustrates the yearly publication trends on the selected topic of grammaticalization through semantic bleaching in idiomatic constructions from 2014 toward 2024. The graph reveals a noteworthy pattern of fluctuating yet generally increasing scholarly output over this period. While the initial years (2014 – 2016) exhibit some instability, with a noticeable dip in 2016, a clear upward trajectory emerges from 2017 onwards. This suggests a growing interest in the intersection of these linguistic phenomena, with researchers increasingly exploring the complex interplay between semantic change, idiomaticity, and grammaticalization process.

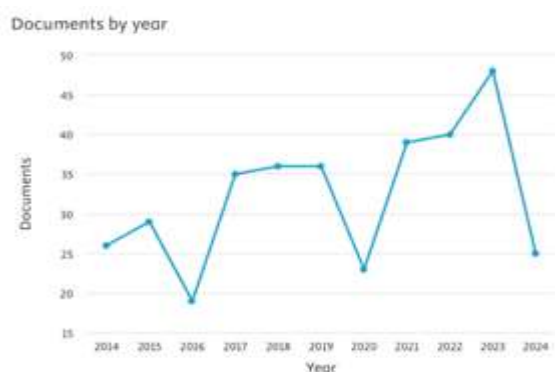


Figure 2. Yearly Publication (2014 – 2024)

Despite periodic fluctuations, the overall trend culminates in a peak publication count in 2023, followed by a slight decline in 2024. This recent surge in scholarly attention could be attributed to several factors, including the increasing availability of large-scale linguistic corpora, advancements in computational linguistics methodologies, and a growing

recognition of the importance of idiomatic expressions in language change and evolution. Further investigation into authorship pattern (see the subsequent part of this Results) could shed light on the specific research clusters and collaborative endeavors driving this upward trend.

### The Leading Journal Publisher

Regarding the notable journal publisher, Figure 3 provides a comparative overview of the leading publication venues for research on grammaticalization through semantic bleaching in idiomatic constructions, spanning the years 2014 toward 2024. The graph highlights the distribution of publications across ten key journals, offering insights into the disciplinary foci and preferred outlets for scholars engaging with this topic. Notably, “*Folia Linguistica*” (Q1 | SJR 0.45) emerges as a prominent venue, demonstrating a consistent output throughout the analyzed period and exhibiting a marked increase in publications towards the latter years. This suggests its significance as a platform for disseminating research on diachronic semantics and language change, areas central to the investigation of grammaticalization and semantic bleaching.

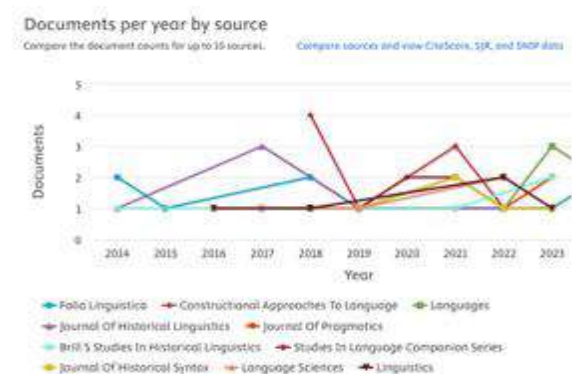


Figure 3. Leading Journal Publisher

Further analysis reveals a diverse range of journals contributing to the discourse, including “*Journal of Historical Linguistics*” (Q3 | SJR 0.15), “*Constructional Approaches to Language*” (Q2 | SJR 0.16), and “*Languages*” (Q1 | SJR 0.4). This diversity underscores the important

nature of this research area, drawing contributions from historical linguistics, cognitive linguistics, and general linguistics. Interestingly, while some journals, such as “Studies in Language Companion Series” (Q4 | SJR 0.1) and “Language Science” (Q1 | SJR 0.42), show sporadic publication patterns, their presence signifies the breadth of perspectives and approaches brought to bear on this research topic. At least, this analysis of publication venues not only identifies key outlets for research dissemination but also highlights the developing landscape of scholarly communication within this domain.

### The Eminent Authors

In addition to the analysis of leading journal publishers, Figure 4 presents a visual representation of the most prolific authors contributing to the field of grammaticalization through semantic bleaching in idiomatic constructions between 2014 and 2024. The bar chart highlights the top 15 authors based on their publication count within the curated dataset, offering insights into the individuals who have significantly shaped scholarly discourse in this area. Notably, Heine, B. emerges as the most prolific author, with a substantial lead in the number of publications. This underscores Heine’s significant contribution to the field, particularly in areas such as grammaticalization theory and cross-linguistic analysis of semantic change, which are central to understanding the interplay between semantic bleaching and the development of grammatical markers from idiomatic expressions.

Following Heine, B., several other authors demonstrate considerable research activity in this domain. These include Narrog, H., Kolyaseva, A., and Rhee, S., each with a notable body of work exploring various facets of grammaticalization and semantic change within idiomatic constructions. The prominence of these scholars suggests the existence of vibrant research clusters and collaborative networks dedicated to investigating the complex dynamics of language change and the evolution of grammatical structures. To some extent, this author-centric analysis not only acknowledges the leading voices in the field but also underscores the collaborative landscape of investigation on grammaticalization and semantic bleaching.

### Publications by Institution

Furthermore, Figure 5 provides an insightful overview of the institutional landscape contributing to research on grammaticalization through semantic bleaching in idiomatic constructions from 2014 to 2024. The chart ranks the top 15 institutions based on their publication output, highlighting the key centers of scholarly activity in this domain. KU Leuven emerges as the leading institution, demonstrating a significant concentration of research focused on this intricate linguistic phenomenon. This prominence may be attributed to the university’s strong tradition in linguistics, particularly in areas such as historical linguistics and cognitive linguistics, which are crucial for understanding the diachronic processes of semantic change and grammaticalization.

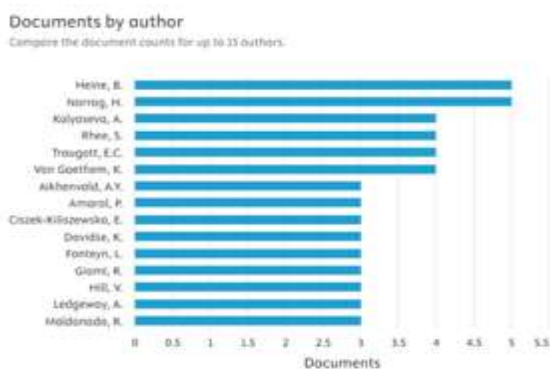


Figure 4. Eminent Authors

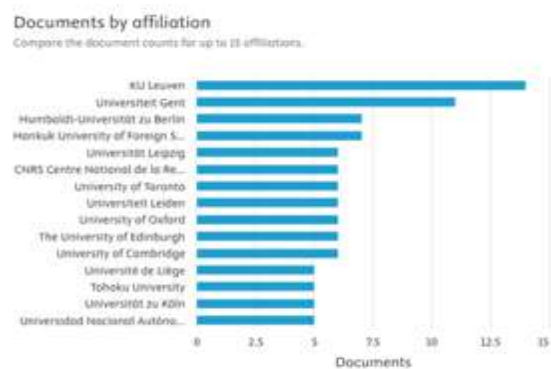
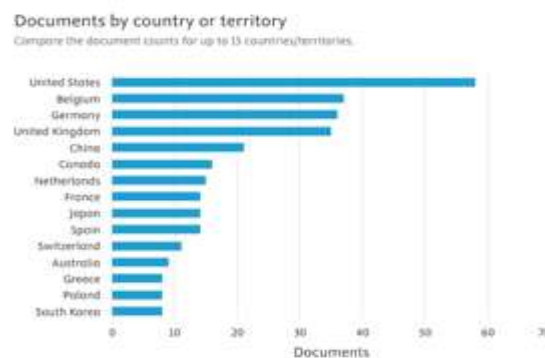


Figure 5. Notable Institutions

Following KU Leuven, several other institutions demonstrate a substantial commitment to this research area, including Universität Gent, Humboldt-Universität zu Berlin, and Hankuk University of Foreign Studies. The presence of these diverse institutions, spanning different geographical regions and academic traditions, underscores the global interest in unraveling the complexities of grammaticalization and semantic bleaching within idiomatic expressions. Furthermore, the prominence of universities like the University of Leipzig, CNRS Centre National de la Recherche Scientifique, and the University of Toronto suggests the involvement of well-established research centers and networks dedicated to advancing knowledge in this field. In short, this institutional analysis not only identifies key contributors to the scholarly discourse but also highlights the collaborative and geographically dispersed nature of research on grammaticalization and semantic change.

### ***Publications by Nation***

Concerning the publications by nation, Figure 6 presents a geographical distribution of research on grammaticalization through semantic bleaching in idiomatic constructions, highlighting the countries that have made the most significant contributions to this field between 2014 and 2024. The United States emerges as the clear leader in terms of publication output, indicating a strong research focus on this complex linguistic phenomenon within America academia. This dominance likely stems from the extensive network of universities and research institutions in the US with dedicated linguistics departments and a tradition of investigating language change, cognitive linguistics, and typology, all of which are crucial for understanding the interplay between semantics, grammar, and idiomaticity.



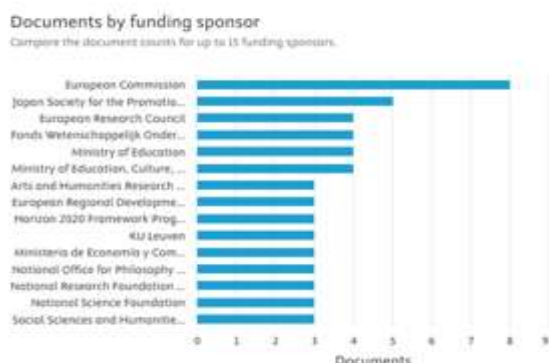
**Figure 6. Notable Countries**

Following the United States, several other countries demonstrate notable contributions to this research area, including Belgium, Germany, and the United Kingdom. The presence of these European countries highlights the strong tradition of linguistic inquiry in this region, particularly in historical linguistics and comparative philology, which provide essential frameworks for analyzing the diachronic evolution of language and the development of grammatical structures. Furthermore, the inclusion of countries like China, Canada, and the Netherlands underscores the global nature of this research endeavor, with scholars from diverse linguistic backgrounds contributing to the understanding of grammaticalization and semantic change in idiomatic constructions. This geographical analysis not only identifies the leading nations in this field but also emphasizes the international landscape of linguistic research.

### ***Publications by Funding Sponsor***

Regarding the funding sponsor, Figure 7 offers a revealing glimpse into the funding landscape supporting investigation on grammaticalization via semantic bleaching in idiomatic constructions between 2014 and 2024. The chart identifies the top funding sponsors acknowledged in publication within this domain, providing insights into the organizations and agencies that have played a crucial role in advancing knowledge in this area. The European Commission emerges as the most prominent funding sponsor, indicating its substantial commitment to supporting research on language

change and evolution, areas central to understanding the intricate processes of grammaticalization and semantic shift. This emphasis likely reflects the European Union’s dedication to fostering research excellence in the humanities and social sciences, recognizing the importance of linguistic investigation for understanding cultural diversity and historical development.

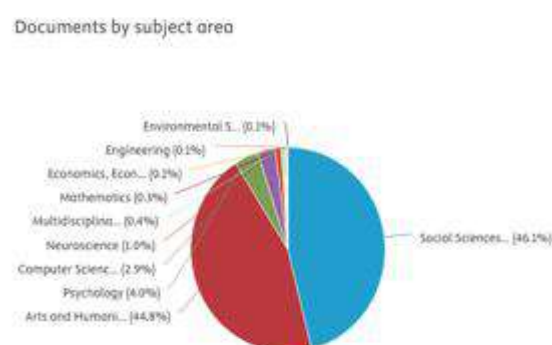


**Figure 7. Notable Funding Sponsor**

Shadowing the European Commission, several other organizations demonstrate significant contributions to funding research in this field, including the Japan Society for the Promotion of Science, Fonds Wetenschappelijk Onderzoek, and the European Research Council. The presence of these diverse funding organizations highlights the global recognition of the importance of investigating grammaticalization and semantic bleaching, with support coming from both national and international agencies dedicated to advancing knowledge in linguistics and related disciplines. Furthermore, the acknowledgement of funding from institutions such as the Ministry of Education, Culture, Sports, Science and Technology (Japan) and the Arts and Humanities Research Council (UK) underscores the role of governmental support in fostering research on language and cognition. This analysis of funding sponsor not only acknowledges the crucial financial backing that enables such research but also emphasizes the intercontinental landscape of scholarly endeavors in this field.

## Documents by Subject Category

Furthermore, Figure 8 illustrates the distribution of documents across various subject area within the research on grammaticalization through semantic bleaching in idiomatic constructions from 2014 to 2024. The pie chart reveals a clear predominance of research classified under “Social Sciences” (46.1%), underscoring the strong affiliation of this topic with the disciplines such as theoretical linguistics, philology, and applied linguistics. This aligns with the nature of this research area, which draws upon insights from several social science fields to investigate the complex interplay between language, cognition, and social factors of language change. The substantial representation of “Arts and Humanities” (44.8%) further emphasizes the humanistic dimension of this research, highlighting its connection to areas such as literature, philosophy, and history, which provide valuable contexts for understanding the evolution of language and meaning.



**Figure 8. Documents by Subject Category**

While “Social Sciences” and “Arts and Humanities” constitute the major subject categories, the chart also reveals contributions from other disciplines, albeit to a lesser extent. The presence of “Psychology” (4.5%) suggests the relevance of cognitive and psycholinguistic perspectives in understanding the mental processes underlying semantic change and grammaticalization. Similarly, the inclusion of “Computer Science” (3.1%) points to the increasing use of computational methods and digital resources in analyzing large-scale linguistic data and modeling language change. The minor contributions from fields such as

“Neuroscience,” “Multidiscipline,” “Mathematics,” and “Environmental Science” further demonstrate the potential for interdisciplinary collaborations and the diverse avenues through which this research area can be explored. In particular, this analysis of subject categories not only highlights the core disciplines driving this research but also underscores its potential to bridge diverse fields of inquiry.

### **Keywords Categorization**

The other main part of the current study is about the keyword’s categorization. In detail, Figure 9 provides a network visualization of keywords extracted from the corpus of research on grammaticalization via semantic bleaching in idiomatic constructions (2014 – 2024). This visualization employs VOSviewer software to map the co-occurrence patterns of keywords, revealing clusters of interconnected terms that represent key themes and research foci within this domain. The network structure highlights the density and interconnectivity of these clusters, offering a visual representation of the intellectual landscape and the relationship between different research strands. The size of each keyword reflects its frequency of occurrence, while the distance between keywords indicates their semantic relatedness, with closer proximity suggesting stronger conceptual links. This network visualization serves as a tool for identifying the core concepts and thematic clusters that have shaped research on grammaticalization and semantic bleaching in recent years.

A closer examination of the network reveals four distinct cluster, each representing prominent thematic area within the field. Cluster

1 (Red in Figure 9) centers around the concept of “theory,” encompassing related terms such as “framework,” “topic,” “work,” “field,” “discipline,” and “research.” This cluster highlights the theoretical underpinnings of the research, emphasizing the importance of frameworks like cognitive linguistics, construction grammar, and usage-based approaches in understanding grammaticalization and semantic change. Cluster 2 (Green in Figure 9) focuses on “grammaticalization,” connecting it to key processes like “semantic bleaching,” “lexicalization,” “change,” and “development,” as well as specific linguistic elements like “marker,” “prefix,” “suffix,” and “particle.” This cluster emphasizes the core linguistic phenomenon under investigation, highlighting the mechanisms and pathways through which lexical items evolve into grammatical markers. Cluster 3 (Blue in Figure 9) revolves around “corpus” and “frequency,” reflecting the methodological approaches employed in this research, with terms like “data,” “analysis,” “method,” and “study” underscoring the empirical nature of these investigations. Finally, Cluster 4 (Yellow in Figure 9) centers on “syntax” and “change,” indicating a focus on the syntactic dimensions of grammaticalization and the diachronic evolution of grammatical structures. This cluster connects “syntax” to related concepts like “structure,” “order,” and “position,” highlighting the role of syntactic analysis in understanding language change. The presence of these distinct yet interconnected clusters demonstrates the nature of research on grammaticalization and semantic bleaching, encompassing theoretical frameworks, linguistic processes, methodological approaches, and specific linguistic domains.

**Tabel 1. Categorization of Keywords**

Cluster	N	%	Color in Figure 9	Itemization of the Keywords
1	43	31.62	Red	acquisition; area; assumption; child; communication; community; concept; connection; construction grammar; description; discipline; experiment; family; field; framework; gap; goal; linguistic; morphology; phonology; polysemy; pragmatic; problem; range; reader; researcher; scholar; sense; sentence; sociolinguistic; speech; state; student; subject; syntax; theory; topic; typology; understanding; way; wide-range; work; world



Cluster	N	%	Color in Figure 9	Itemization of the Keywords
2	42	30.88	Green	analogy; auxiliary; Chinese; constructionalization; decategorialization; diachronic development; dialect; emergence; erosion; extension; force; grammaticalization; grammaticalization process; grammaticalization theory; hand; item; lexicalization; loss; manner; marker; mechanism; modal; modal verb; noun phrase; observation; overview; past; path; phonetic reduction; position; pragmatic function; reduction; rise; Romance; Romance Language; Spanish; stage; syntactic; syntactic change; traugott
3	40	29.41	Blue	adverb; American English; bleaching; conjunction; corpora; corpus; cross; degree; discourse marker; distribution; element; favor; frequency; German; grammaticalisation; head; impact; influence; modern English; morpheme; motion; negation; origin; parameter; particle; period; person; prefix; preposition; presence; productivity; relevance; semantic bleaching; semantic change; sign; situation; suffix; tendency; turn
4	11	8.09	Yellow	addition; application; attention; condition; detail; event; metaphor; methodology; metonymy; nature; principle

Furthermore, Table 1 presents a detailed breakdown of the keywords comprising Cluster 1, the “theory” cluster, identified in the network visualization of research on grammaticalization via semantic bleaching in idiomatic constructions. This cluster encompasses a diverse range of terms reflecting the conceptual and disciplinary frameworks that underpin the research area. The keywords in this cluster predominantly relate to broader academic discourse, encompassing notions of knowledge creation, dissemination, and scholarly communication. Terms such as “theory,” “framework,” “topic,” “work,” “field,” “discipline,” and “research” all point to the overarching intellectual context within which this research is situated. Also, the inclusion of keywords like “communication,” “community,” “scholar,” “reader,” and “student” highlights the collaborative and communicative aspects of academia, emphasizing the role of dialogue, dissemination, and knowledge sharing within the research community.

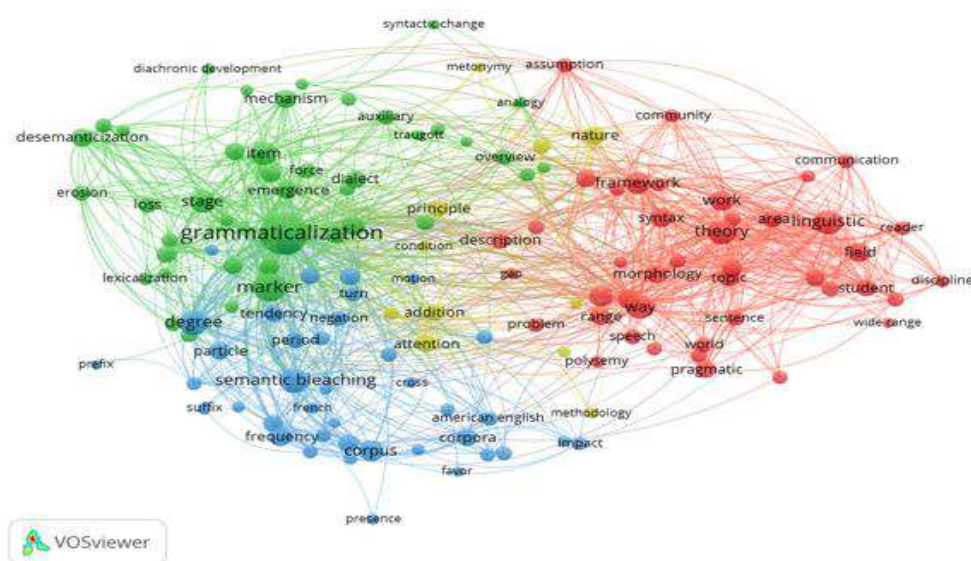
Within this broad thematic cluster, several sub-clusters emerge, reflecting more specific areas of focus. One sub-cluster (1.1) centers around the concept of “understanding,” encompassing related terms like “concept,” “assumption,” “description,” and “goal.” This sub-cluster emphasizes the cognitive and epistemological dimensions of research, highlighting the pursuit of knowledge and the construction of meaning. Another sub-cluster

(1.2) revolves around the notion of “linguistic inquiry,” bringing together terms like “linguistic,” “typology,” “syntax,” “morphology,” “phonology,” “semantics,” and “pragmatics.” This sub-cluster reflects the core linguistic disciplines that contribute to the investigation of grammaticalization and semantic bleaching, emphasizing the importance of analyzing language structure and function across different levels of analysis. A third sub-cluster (1.3) focuses on the “scope of research,” encompassing terms like “area,” “range,” “world,” and “wide-range.” This sub-cluster highlights the breadth and diversity of research within this domain, encompassing cross-linguistic comparisons, diachronic studies, and investigations of various language families and linguistic phenomena. These sub-clusters, while interconnected, provide a more nuanced understanding of the “theory” cluster, demonstrating the nature of the intellectual landscape surrounding research on grammaticalization and semantic bleaching.

Therefore, the identification of sub-clusters within the “theory” cluster (or Cluster 1) prompts further investigation into the specific research questions that motivate scholarly inquiry within each area. By examining the keywords associated with these sub-clusters, we can formulate targeted research questions that address the cognitive, linguistic, and methodological dimensions of research on grammaticalization via semantic bleaching in

idiomatic constructions. As for the sub-cluster 1.1, one may put attention on (a) how do different theoretical frameworks (e.g., cognitive linguistics, construction grammar) shape our understanding of semantic bleaching and grammaticalization in idiomatic constructions; and (b) what are the underlying assumptions and conceptual metaphors that guide research on semantic change and grammaticalization? Thereafter, as for the sub-cluster 1.2, one can focus on (a) what are the typological patterns and cross-linguistic variations observed in the grammaticalization of idiomatic constructions;

and (b) how do different levels of linguistic analysis (e.g., phonological, morphological, syntactic, semantic, pragmatic) contribute to our understanding of semantic bleaching and grammaticalization? Lastly, as for the sub-cluster 1.3, for the upcoming analysis, we can investigate (a) what are the linguistic limitations of investigation on grammaticalization and semantic bleaching in idiomatic constructions; and (b) how can cross-linguistic studies contribute to a more comprehensive understanding of the universal and language-specific characteristics of grammaticalization/



**Figure 9. Network Visualization of the Research Keywords**

In addition to the analysis of Cluster 1, Table 1 also presents a specified itemization of the keywords comprising Cluster 2, the “grammaticalization” cluster. This cluster encompasses a rich array of terms reflecting the core linguistic processes and mechanisms involved in the diachronic evolution of grammatical structures. Keywords such as “grammaticalization,” “grammaticalization process,” “grammaticalization theory,” “semantic bleaching,” “lexicalization,” and “change” all point to the central focus of this research area, highlighting the dynamic interplay between semantic change, lexical items, and the development of grammatical markers. The inclusion of terms like “mechanism,” “stage,” “path,” and “development” further emphasizes the focus on understanding the specific pathways and stages involved in grammaticalization, while

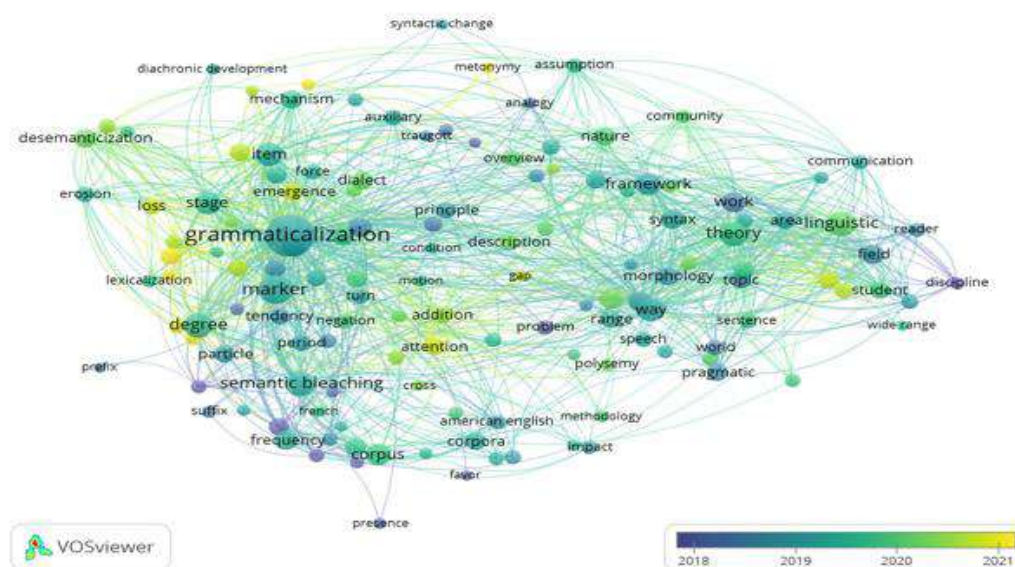
keywords like “analogy,” “extension,” “loss,” and “reduction” hint at the types of semantic and formal changes that accompany this process.

Within this “grammaticalization” cluster, several sub-clusters can be identified, reflecting different facets of this phenomenon. One sub-cluster (2.1) centers around the concept of “linguistic units,” encompassing terms like “item,” “marker,” “modal,” “modal verb,” “auxiliary,” “noun phrase,” and “particle.” This sub-cluster highlights the diverse range of linguistic elements that can undergo grammaticalization, ranging from individual words to complex phrases. Another sub-cluster (2.2) focuses on “linguistic processes,” bringing together terms like “analogy,” “erosion,” “extension,” “loss,” “phonetic reduction,” “reduction,” and “syntactic change.” This sub-cluster emphasizes the dynamic nature of

grammaticalization, highlighting the various mechanisms through which linguistic forms evolve and change over time. A third sub-cluster (2.3) revolves around “diachronic perspectives,” encompassing keywords such as “diachronic development,” “past,” “emergence,” “rise,” and “observation.” This sub-cluster underscores the prominence of historical linguistics and diachronic analysis in understanding the long-term trajectories of grammaticalization. Furthermore, the inclusion of language-specific terms like “Chinese,” “Romance,” “Romance Language,” and “Spanish,” as well as the mention of prominent scholar “Traugott,” suggests the influence of specific language families and influential researchers in shaping this research area. These sub-clusters, while interconnected, provide a more granular understanding of the “grammaticalization” cluster, demonstrating the original nature of this linguistic phenomenon and the perspective from which it can be investigated.

Accordingly, the examination of sub-cluster within the “grammaticalization” cluster allows for a more targeted exploration of research questions related to the specific linguistic units, processes, and diachronic perspectives involved in grammaticalization. By examining the keywords associated with each

sub-cluster, we can formulate research questions that delve deeper into the mechanisms and pathways of grammatical change. As for the sub-cluster 2.1, one can deal with several questions, such as (a) what are the specific characteristics of lexical items that make them more susceptible to grammaticalization; and (b) how do the grammaticalization pathways of different linguistic units (e.g., verbs, nouns, particles) differ, and what factors account for these differences? As for the sub-cluster 2.2, one may put attention on (a) what is the role of analogy in the grammaticalization of idiomatic constructions, and how does it interact with other processes like semantic bleaching and phoetic reduction; and (b) how do different type of semantic change (e.g., bleaching, generalization, metaphorization) contribute to the grammaticalization of idiomatic expressions? Also, for the sub-cluster 2.3, we can focus on (a) what are the typical stages involved in the grammaticalization of idiomatic constructions, and how do these stages manifest across different languages and language families; and (b) how can historical data and diachronic corpora be used to reconstruct the pathways of grammaticalization and to identify the factors that trigger or inhibit this process?



**Figure 10. Overlay Visualization of the Research Keywords**

Accompanying analysis results for the Clusters 1 and 2, Table 1 also provides a detailed

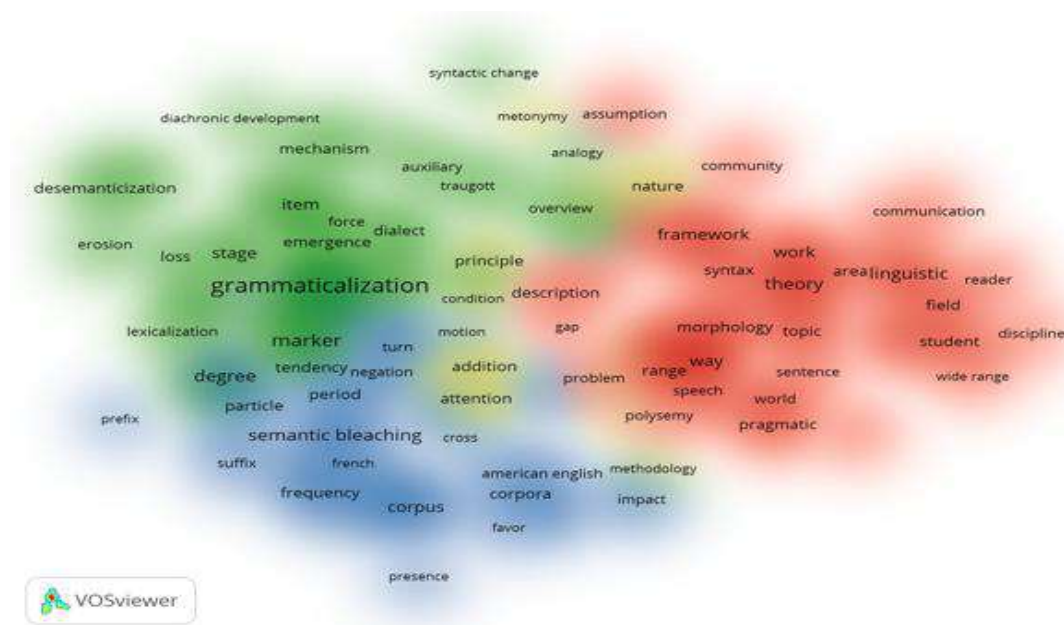
view of the keywords associated with Cluster 3, the “corpus and frequency” cluster, which

emerged from the network visualization of research on grammaticalization via semantic bleaching in idiomatic constructions. This cluster reflects the empirical and quantitative orientation of much and the use of corpora in analyzing linguistic phenomena. Keyword such as “corpora,” “corpus,” “frequency,” “distribution,” and “cross” all point to the centrality of corpus linguistics methodologies in investigating grammaticalization and semantic change. The inclusion of terms like “degree,” “parameter,” “presence,” and “tendency” further emphasizes the quantitative nature of this research, suggesting a focus on measuring and analyzing the frequency, distribution, and patterns of linguistic features within large datasets. Moreover, the presence of keywords like “semantic bleaching” and “semantic change” reinforces the link between this methodological cluster and the core linguistic processes under investigation.

Within this methodological framework, several sub-clusters can be identified, reflecting different facets of corpus-based research. One sub-cluster (3.1) centers around the concept of “linguistic analysis,” “negation,” “particle,” “prefix,” “preposition,” “suffix,” and “turn.” This sub-cluster highlights the diverse range of linguistic units and structures that can be investigated using corpus data, emphasizing the versatility of this approach in analyzing various levels of language. Another sub-cluster (3.2) focuses on “corpus characteristics,” bringing together terms like “corpora,” “corpus,” “cross,” “American English,” “modern English,” and “German.” This sub-cluster emphasizes the importance of considering the specific characteristics of different corpora, including language variety, time period, and genre, when conducting corpus-based research. A third sub-cluster (3.3) revolves around “quantitative analysis,” encompassing keywords such as “degree,” “distribution,” “frequency,” “parameter,” “presence,” “productivity,” and

“tendency.” This sub-cluster highlights the quantitative nature of corpus linguistics, emphasizing the use of statistical measures and computational tools to analyze patterns and trends in language use. These sub-clusters, while interconnected, provide a detailed consideration of the “corpus and frequency” cluster, demonstrating the applications of corpus linguistics in investigating grammaticalization and semantic bleaching.

Moreover, the identification of sub-clusters within the “corpus and frequency” cluster allows for a more focused exploration of research questions related to the specific applications of corpus linguistics in the study of grammaticalization and semantic bleaching. As for the sub-cluster 3.1, we can put attention on several questions, such as (a) how corpus analysis can be used to trace the diachronic development of specific linguistic elements (e.g., adverbs, conjunctions, prefixes) as they undergo grammaticalization; and (b) what role do corpus-based studies play in identifying and analyzing the subtle semantic shifts and functional changes that accompany the grammaticalization of idiomatic constructions? Thereafter, for the sub-cluster 3.2, one may put attention on (a) how do the findings of corpus-based studies on grammaticalization vary depending on the type of corpus used (e.g., spoken vs. written, historical vs. contemporary); and (b) what are the challenges and limitations of using corpora to study diachronic phenomena like grammaticalization, and how can these challenges be addressed? Additionally, for the sub-cluster 3.3, the questions can be as follows (a) how can quantitative corpus analysis be used to measure the degree of semantic bleaching and grammaticalization in idiomatic constructions; and (b) what statistical methods are most effective for analyzing the frequency and distribution of linguistic features associated with grammaticalization in corpora?



**Figure 11. Density Visualization of the Research Keywords**

In addition to the three clusters as stated in the previous part, Table 1 also provides a detailed breakdown of the keywords associated with Cluster 4, the “syntax” and “change” cluster. This cluster reflects the focus on syntactic aspects of language change and the role of syntactic analysis in understanding grammaticalization. Keywords such as “syntax,” “change,” “addition,” “condition,” and “event” all point to the dynamic interplay between syntactic structures and the processes of language evolution. The inclusion of terms like “application,” “attention,” and “detail” further emphasizes the meticulous analysis required to understand the subtle syntactic shifts that accompany grammaticalization. Moreover, the presence of keywords like “metaphor” and “metonymy” suggests the potential influence of cognitive mechanisms on syntactic change, highlighting the interconnectedness of different levels of linguistic analysis.

Within this “syntax” and “change” cluster, several sub-cluster can be identified, reflecting different facets of this research area. One sub-cluster (4.1) centers around the concept of “syntactic structure,” encompassing terms like “addition,” “condition,” and “detail.” This sub-cluster highlights the importance of examining the specific syntactic configurations and constraints that govern the grammaticalization of

idiomatic constructions. Another sub-cluster (4.2) focuses on “dynamic processes,” bringing together terms like “change” and “event.” This sub-cluster emphasizes the diachronic nature of grammaticalization, highlighting the gradual evolution of syntactic structures over time. A third sub-cluster (4.3) revolves around “cognitive mechanisms,” encompassing keywords such as “metaphor” and “metonymy.” This sub-cluster suggests the potential role of cognitive processes in shaping syntactic change, highlighting the interplay between conceptual structure and linguistic form. Furthermore, the inclusion of terms like “application,” “attention,” “methodology,” “nature,” and “principle” points to the broader methodological and theoretical considerations involved in studying syntactic change. These sub-clusters, while interconnected, provide a further nuanced understanding of the “syntax” and “change” cluster, demonstrating the nature of this research area.

Moreover, Cluster 4 reveals several possibilities of research questions related to the syntactic dimensions of grammaticalization. By delving into the sub-cluster identified within this thicker theme, we can formulate more targeted research questions that address the intricacies of syntactic structure, dynamic processes, and cognitive mechanisms involved in the



grammaticalization of idiomatic constructions. As for the sub-cluster 4.1, we can consider several questions, such as (a) how do changes in syntactic structure (e.g., word order, constituent structure) reflect the grammaticalization of idiomatic constructions; and (b) what are the syntactic conditions and constraints that govern the integration of grammaticalized elements derived from idiomatic expressions into larger syntactic structures?

Thereafter, for the sub-cluster 4.2, one may put attention on (a) what are the typical stages of syntactic change observed in the grammaticalization of idiomatic constructions, and how do these stages relate to semantic changes; and (b) how can we trace the historical development of syntactic structures associated with grammaticalized idiomatic constructions using diachronic corpora and phylogenetic methods? Lastly, for the sub-cluster 4.3, one can put focus on (a) how do cognitive processes like metaphor and metonymy contribute to the reanalysis of syntactic structures and the emergence of new grammatical functions in idiomatic constructions; and (b) what is the relationship between conceptual change and syntactic change in the grammaticalization of idiomatic expressions, and how do these changes influence each other?

## Discussion

This scientometric investigation into research on grammaticalization via semantic bleaching in idiomatic constructions reveals several noteworthy trends and patterns within the field. The analysis of publication trends, prominent authors, institutional affiliations, and geographical distribution highlights a growing global interest in this linguistic phenomenon. The identification of key journals and funding sponsors underscores the interdisciplinary nature of this research, drawing contributions from various subfields of linguistics, cognitive science, and other related disciplines. Moreover, the thematic analysis of subject areas and keyword clusters provides a comprehensive overview of the intellectual landscape, revealing the core concepts, theoretical frameworks, and methodological approaches that have shaped research in this domain (*see also* Figure 10). Figure 10, an overlay visualization of keywords,

further enriches this analysis by incorporating a temporal dimension. The color gradient, ranging from blue (2018) to yellow (2024), reveals the evolving prominence of different themes over time. This diachronic perspective highlights the nature of research in this field, showing how certain keywords, such as “grammaticalization” and “semantic bleaching,” have remained central throughout the analyzed period, while others, such as “corpus” and “frequency,” have gained prominence in more recent years. This visualization underscores the ongoing development and refinement of research foci within this domain, reflecting the continuous exploration of new perspectives and methodologies in the study of grammaticalization and semantic bleaching.

The keyword analysis, in particular, offers precious insights into the thematic cluster that characterize research on grammaticalization and semantic bleaching. The emergence of four distinct clusters – “theory,” “grammaticalization,” “corpus & frequency,” and “syntax & change” – reflects the original nature of this research area, encompassing theoretical foundations, linguistic process, methodological approaches, and specific linguistic domain. The identification of sub-clusters within each broader theme further refines our understanding of the key research foci and allows for a further interpretation of the intellectual landscape (*see also* Figure 11). Figure 11, a density visualization of keywords, provides a complementary perspective by highlighting the concentration of research activity within each cluster. The darker areas indicate a higher density of keywords, signifying a greater concentration of research effort and scholarly attention in those areas. Notably, the “grammaticalization” cluster exhibits a particularly high density, underscoring its centrality within this research domain. The “theory” cluster also shows a condensed concentration, reflecting the importance of theoretical frameworks in guiding research on grammaticalization and semantic bleaching.

To a certain degree, Cluster 1 (“theory”) and Cluster 2 (“grammaticalization”) highlight the strong theoretical underpinnings of this research area. The prominence of keywords related to cognitive linguistics, construction grammar, and usage-based approaches

underscores the influence of these frameworks in shaping our understanding of grammaticalization and semantic change. This aligns with previous research emphasizing the importance of considering language as a dynamic system shaped by usage patterns and cognitive mechanisms (e.g., Heine et al., 2016; Narrog & Heine, 2018; Rhee, 2022a). These studies have demonstrated how frequent and recurring patterns of language use can lead to the entrenchment of linguistic structures, resulting in the conventionalization of grammatical forms and meanings. Moreover, they have highlighted the role of cognitive processes, such as analogy, categorization, and metaphor, in shaping the way language is structured and processed. In line with Davidse & Brems (2023), the prominence of these perspective in the “theory” cluster suggests that research on grammaticalization and semantic bleaching is increasingly drawing on these frameworks to understand the complex interplay between language use, cognition, and diachronic change. Additionally, the focus on grammaticalization processes, mechanisms, and pathways further reflects the ongoing efforts to refine our understanding of how lexical items evolve into grammatical markers, drawing on insights from diachronic linguistic (e.g., Hill & Mardale, 2019; Pericchi et al., 2020; Rhee, 2022b; Traugott, 2019, 2022), typology (Narrog, 2017b), and cross-linguistic comparison (e.g., Rhee & Zhang, 2024; Van Goethem & Hendriks, 2021). This emphasis on the dynamic nature of language change aligns with the increasing recognition of the importance of diachronic perspective in linguistic analysis. By tracing the chronological development of grammatical structures, researchers can gain a deeper understanding of the forces that shape language and the intricate pathways through which grammaticalization unfolds. Echoing the conclusions of Giomi (2017), the inclusion of typological and cross-linguistic perspectives enriches this research by highlighting both universal tendencies and language-specific variations in grammaticalization processes.

Furthermore, Cluster 3 (“corpus & frequency”) and Cluster 4 (“syntax & change”) emphasize the empirical and analytical dimensions of this research. The prominence of corpus linguistic methodologies reflects the growing reliance on data-driven approaches to investigate grammaticalization and semantic

bleaching (e.g., Norde & Van Goethem, 2014; Van Goethem & Norde, 2020). In some measure, corpus linguistics, with its focus on analyzing large-scale collections of authentic language data, offers a prevailing tool for examining the intricate patterns of language use and change. By utilizing corpora, researchers can track the frequency and distribution of linguistic features, identify subtle semantic shifts, and analyze the co-occurrence patterns of words and constructions (Fonteyn, 2020; Fonteyn & Manjavacas, 2021). This empirical approach provides valuable evidence for understanding the gradual nature of grammaticalization, revealing how subtle changes in language use accumulate over time to produce significant shifts in grammatical structure and meaning. Furthermore, the use of corpora allows for qualitative analysis of linguistic patterns, enabling researchers to trace the diachronic development of grammatical structures, measure the degree of semantic change, and identify the factors that contribute to grammaticalization (Amaral et al., 2023; Hu et al., 2022). Additionally, the focus on syntactic analysis further highlights the importance of examining the structural transformations that accompany grammaticalization, exploring the interplay between syntax and semantics in the evolution of language (Aikhenvald, 2019a). As implied in the study of Fonteyn et al. (2022), as lexical items conversion into grammatical markers, they often undergo syntactic reanalysis, leading to changes in their distribution, co-occurrence patterns, and relationships with other elements in a sentence. These syntactic shifts can reflect the changing semantic functions of grammaticalizing constructions, as they become more integrated into the grammatical system and acquire new roles in expressing grammatical relations.

In the context of the Indonesian language, to a certain extent, this research has significant implications for understanding the diachronic development of grammatical structures and the role of semantic bleaching in shaping the language’s evolution. Previous studies have documented instances of grammaticalization in Indonesian, such as the development of auxiliaries from main verbs and the emergence of prepositions from nouns (e.g., Sneddon et al., 2010; Verhaar, 1983). For instance, the verb *mau* ‘want’ has grammaticalized into a pseudo-future (temporal) marker as in “*Saya mau makan*

*sate ayam*” (lit. “I want to eat chicken satay”). The noun *atas* ‘top’ has developed into a preposition meaning ‘on’ or ‘above’, as in “*Atas nama keluarga besar, saya menyampaikan terima kasih yang setulus-tulusnya atas kehadiran Rama/Ibu/Bapak dalam acara misa syukur ini*” (lit. “On behalf of my extended family, I would like to express my sincere thanks for the presence of Rama/Ibu/Bapak at this thanksgiving mass”). These studies have often focused on specific lexical items or grammatical categories, tracing their diachronic evolution and analyzing the semantic and syntactic changes they have undergone.

However, there remains a need for supplementary comprehensive investigations of grammaticalization in Indonesian, as stated by Nugraha (2024a, 2024b), particularly those that utilize corpus-based methods and incorporate understandings from cognitive linguistics and construction grammar. Such studies could provide a more data-driven understanding of the considerations that drive grammaticalization in Indonesian, including the role of frequency, semantic bleaching, and syntactic reanalysis. Furthermore, by following the recommendations from Ledgeway et al., (2022) and Nugraha (2022), cross-linguistic comparisons with related languages could shed light on the typological characteristics and areal influences that have shaped the development of Indonesian grammar.

## CONCLUSION

This scientometric investigation, to some extent, has provided a notable overview of the research landscape on grammaticalization via semantic bleaching in idiomatic constructions. By analyzing curated dataset of publications, this analysis has identified key trends, thematic clusters, and influential contributors in this domain. The findings emphasize the growing concern in this linguistic phenomenon, with increasing scholarly attention dedicated to unravelling the interplay between lexicalization, semantic change, and grammaticalization in idiomatic constructions. The identification of four distinct thematic clusters – “theory,” “grammaticalization,” “corpus & frequency,” and “syntax & change” – underscores the nature

of this research area, encompassing theoretical fundamentals, linguistic advancements, methodological approaches, and particular linguistic domains.

While this study offers insights into research on grammaticalization and semantic bleaching, it is essential to acknowledge its limitations. Firstly, the study relied on a specific dataset extracted from Scopus, which, while comprehensive, may not capture all relevant publications in this domain. Other databases could be included in future research to ensure a more exhaustive representation of the research landscape. Secondly, the exploration focused primarily on keyword co-occurrence patterns, which may not fully capture the complexities of the theoretical frameworks and methodological approaches employed in this research area. A supplementary in-depth qualitative analysis of the publications themselves could provide a richer understanding of the research trends and debates within this field.

Building upon the findings and limitations of this study, several avenues for future research emerge. Firstly, future studies could expand the scope of analysis by incorporating data from multiple databases and including a wider range of publication types, such as monographs and dissertations. This would provide a more comprehensive picture of the research landscape. Secondly, future research could delve richer into the qualitative examination of publications, scrutinizing the theoretical frameworks, methodological approaches, and research findings in greater detail. This would allow for a more critical evaluation of the current state of knowledge and identify areas where further investigation is needed. Conclusively, future studies could explore the implications of these findings aimed at specific language, such as Indonesian, by conducting detailed corpus-based analysis of grammaticalization phenomena in the language. This would contribute to a profounder understanding of the language-specific factors that shape grammaticalization pathways and the role of idiomatic constructions in the evolution of grammatical systems.

# REFERENCES

- Aikhenvald, A. Y. (2018). Serial Verbs. In *Serial Verbs*.  
<https://doi.org/10.1093/oso/9780198791263.001.0001>
- Aikhenvald, A. Y. (2019a). Bridging linkage in Tariana, An Arawak language from Northwest Amazonia. *International Journal of American Linguistics*, 85(4), 455–496.  
<https://doi.org/10.1086/704563>
- Aikhenvald, A. Y. (2019b). Expressing “possession” Motivations, meanings, and forms. In *Studies in Language Companion Series* (Vol. 206).  
<https://doi.org/10.1075/slcs.206.02aik>
- Aikhenvald, A. Y., Dixon, R. M. W., & White, N. M. (2020). The essence of ‘word.’ In *Phonological Word and Grammatical Word: A Cross-Linguistic Typology*.  
<https://doi.org/10.1093/oso/9780198865681.003.0001>
- Alboiu, G., & Hill, V. (2023). Subjunctives in Romanian Languages: Micro-Parametric Variation in Complement CPs and the Periphrastic Future. *Languages*, 8(4).  
<https://doi.org/10.3390/languages8040267>
- Amaral, P. (2018). Current Perspectives on Historical Linguistics. In *The Cambridge Handbook of Spanish Linguistics*.  
<https://doi.org/10.1017/9781316779194.027>
- Amaral, P., Hu, H., & Kübler, S. (2023). Tracing semantic change with distributional methods: The contexts of algo. *Diachronica*, 40(2), 153–194.  
<https://doi.org/10.1075/dia.21012.ama>
- Bouveret, M. (2020). *Introduction. Lexicalization, grammaticalization and constructionalization of the verb give across languages* (pp. 1–22).  
<https://doi.org/10.1075/cal.29.int>
- Brinton, L. J., & Traugott, E. C. (2017). Non-syntactic sources and triggers of syntactic change. In *The Cambridge Handbook of Historical Syntax*.  
<https://doi.org/10.1017/9781107279070.027>
- Ciszek-Kiliszweska, E. (2014). Middle English preposition Twe n(E). *Studia Anglica Posnaniensia*, 49(3), 91–111.  
<https://doi.org/10.1515/stap-2015-0008>
- Ciszek-Kiliszweska, E. (2016). John Lydgate’s Use of Prepositions and Adverbs Meaning “Between.” *Studia Anglica Posnaniensia*, 51(3), 45–61. <https://doi.org/10.1515/stap-2016-0014>
- Ciszek-Kiliszweska, E. (2018). Degree of grammaticalisation of behind, beneath, between and betwixt in Middle English. *Research in Language*, 16(2), 193–222.  
<https://doi.org/10.2478/rela-2018-0006>
- Davidse, K., & Brems, L. (2023). English type noun-constructions with lexical functions: A new functional-structural typology. In *Type Noun Constructions in Slavic, Germanic and Romance Languages: Semantics and Pragmatics on the Move*.  
<https://doi.org/10.1515/9783110701104-003>
- Davidse, K., Brems, L., & Van linden, A. (2023). Type noun-constructions in English and Dutch. In *Type Noun Constructions in Slavic, Germanic and Romance Languages: Semantics and Pragmatics on the Move*.  
<https://doi.org/10.1515/9783110701104-002>
- De Belder, M., & Van Koppen, M. (2016). One Module, Different Levels of Merge: AN(N) Compounds in Dutch. *Studia Linguistica*, 70(1), 1–33. <https://doi.org/10.1111/stul.12040>
- Fonteyn, L. (2020). What about grammar? using BERT embeddings to explore functional-semantic shifts of semi-lexical and grammatical constructions. *CEUR Workshop Proceedings*, 2723, 257–268.
- Fonteyn, L., & Manjavacas, E. (2021). Adjusting scope: A computational approach to case-driven research on semantic change. *CEUR Workshop Proceedings*, 2989, 280–298.
- Fonteyn, L., Manjavacas, E., & Budts, S. (2022). Exploring Morphosyntactic Variation & Change With Distributional Semantic Models. *Journal of Historical Syntax*, 6(13–18).  
<https://doi.org/10.18148/hs/2022.v7i13-18.132>
- Giomi, R. (2017). The interaction of components in a functional discourse grammar account of grammaticalization. In *The Grammaticalization of Tense, Aspect, Modality and Evidentiality: A Functional Perspective*.  
<https://doi.org/10.1515/9783110519389-003>
- Giomi, R. (2023a). A Functional Discourse Grammar Theory of Grammaticalization Volume 1: Functional Change. In *Brill’s Studies in Historical Linguistics* (Vol. 19).
- Giomi, R. (2023b). A Functional Discourse Grammar Theory of Grammaticalization Volume 2: Formal Change. In *Brill’s Studies in Historical Linguistics* (Vol. 20).
- Heine, B. (2018). Grammaticalization in Africa: Two contrasting hypotheses. In *Grammaticalization from a Typological Perspective*.  
<https://doi.org/10.1093/oso/9780198795841.003.0002>
- Heine, B., & Kuteva, T. (2023). The Genesis of Grammar: A Reconstruction. In *The Genesis of Grammar: A Reconstruction*.  
<https://doi.org/10.1093/oso/9780199227761.001.0001>
- Heine, B., Narrog, H., & Long, H. (2016). Constructional change vs. grammaticalization:

- From compounding to derivation. *Studies in Language*, 40(1), 137–175. <https://doi.org/10.1075/sl.40.1.05hei>
- Henneken, E. A., & Kurtz, M. J. (2019). *Usage Bibliometrics as a Tool to Measure Research Activity* (pp. 819–834). [https://doi.org/10.1007/978-3-030-02511-3\\_32](https://doi.org/10.1007/978-3-030-02511-3_32)
- Hill, V., & Mardale, A. (2019). Patterns for Differential Object Marking in the History of Romanian. *Journal of Historical Syntax*, 3(5), 1–47. <https://doi.org/10.18148/hs/2019.v3i5.25>
- Hopper, P. J. (1991). *On some principles of grammaticization* (p. 17). <https://doi.org/10.1075/tsl.19.1.04hop>
- Hu, H., Amaral, P., & Kübler, S. (2022). Word embeddings and semantic shifts in historical Spanish: Methodological considerations. *Digital Scholarship in the Humanities*, 37(2), 441–461. <https://doi.org/10.1093/llc/fqab050>
- Kisiel, A., & Kolyaseva, A. (2023). Towards a comprehensive typology of type noun constructions in Slavic languages, with a special focus on Polish and Russian. In *Type Noun Constructions in Slavic, Germanic and Romance Languages: Semantics and Pragmatics on the Move*. <https://doi.org/10.1515/9783110701104-013>
- Kolyaseva, A. (2021). The nominal uses of the Russian rod ('genus', 'genre', 'kind') and tip ('type'): The starting point of desemanticization. *Slovo a Slovesnost*, 82(1), 3–44.
- Kolyaseva, A. (2022). The Russian prepositional TIPA and VRODE in online student discourse: Evidence of attraction? *Linguistics*, 60(5), 1451–1485. <https://doi.org/10.1515/ling-2021-0004>
- Kolyaseva, A., & Kisiel, A. (2023). Taxonomic nouns in Slavic: An overview. In *Type Noun Constructions in Slavic, Germanic and Romance Languages: Semantics and Pragmatics on the Move*. <https://doi.org/10.1515/9783110701104-012>
- Ledgeway, A., Charles Smith, J., & Vincent, N. (2022). Periphrasis and Inflexion in Diachrony: A View from Romance. In *Periphrasis and Inflexion in Diachrony: A View from Romance*. <https://doi.org/10.1093/oso/9780198870807.001.0001>
- Narrog, H. (2017a). Relationship of form and function in grammaticalization - the case of modality. In *The Grammaticalization of Tense, Aspect, Modality and Evidentiality: A Functional Perspective*. <https://doi.org/10.1515/9783110519389-004>
- Narrog, H. (2017b). The morphosyntax of grammaticalization in Japanese. In *Handbook of Japanese Syntax*. <https://doi.org/10.1515/9781614516613-010>
- Narrog, H., & Heine, B. (2017). Grammaticalization. In *The Cambridge Handbook of Historical Syntax*. <https://doi.org/10.1017/9781107279070.002>
- Narrog, H., & Heine, B. (2018). Grammaticalization from a typological perspective. In *Grammaticalization from a Typological Perspective*. <https://doi.org/10.1093/oso/9780198795841.001.0001>
- Norde, M., & Van Goethem, K. (2014). Bleaching, productivity and debonding of prefixoids: A corpus-based analysis of "giant" in German and Swedish. *Linguisticae Investigationes*, 37(2), 256–274. <https://doi.org/10.1075/li.37.2.05nor>
- Nugraha, D. S. (2020). The Idiomatic Constructions of "Bapak" in Bahasa Indonesia. *RETORIKA: Jurnal Bahasa, Sastra, Dan Pengajarannya*, 13(2). <https://doi.org/10.26858/retorika.v13i2.13099>
- Nugraha, D. S. (2022). Ciri Morfosemantik Afiks Derivasional {ber-} dalam Konstruksi Verba Denumeralia Bahasa Indonesia (Morphosemantic Features of Derivational Affix {ber-} in Indonesian Denumeral Verb Constructions). *Indonesian Language Education and Literature*, 8(1), 31. <https://doi.org/10.24235/ileal.v8i1.9543>
- Nugraha, D. S. (2024a). A Corpus-Based Study of Memberi 'Give' Light Verb Constructions. *International Journal of Society, Culture and Language*, 12(2), 104–120. <https://doi.org/10.22034/ijsc.2024.2023112.3389>
- Nugraha, D. S. (2024b). A Morphological Analysis of the Indonesian Suffixation: A Look at the Different Types of Affixes and Their Semantic Changes. *GEMA Online Journal of Language Studies*, 24(4), 109–132. <https://doi.org/10.17576/gema-2024-2404-07>
- Pericchi, N., Davidse, K., Cornillie, B., & Van De Velde, F. (2020). A diachronic study of indirect object doubling in Argentinian Spanish. *Acta Linguistica Hafniensia*, 52(1), 45–80. <https://doi.org/10.1080/03740463.2020.1744874>
- Rhee, S. (2017). What happens when the will withers: The case of hortative in Korean. *Lingua*, 189–190, 46–65. <https://doi.org/10.1016/j.lingua.2016.11.005>
- Rhee, S. (2019). Politeness pressure on grammar: The case of first and second person pronouns and address terms in Korean. *Russian Journal of Linguistics*, 23(4), 950–974. <https://doi.org/10.22363/2687-0088-2019-23-4>



- 950-974
- Rhee, S. (2022a). Comparatives in Korean: A grammaticalization perspective. *Lingua*, 265. <https://doi.org/10.1016/j.lingua.2021.103163>
- Rhee, S. (2022b). Where to go at the end: Polylexicalization and polygrammaticalization of KAz 'edge' in Korean. *Russian Journal of Linguistics*, 26(3), 571–595. <https://doi.org/10.22363/2687-0088-30616>
- Rhee, S., & Zhang, L. (2024). The way of truth: The case of the Korean discourse marker cincca in comparison with Chinese zhenshi and zhende. *Russian Journal of Linguistics*, 28(4), 818–842. <https://doi.org/10.22363/2687-0088-40500>
- Sneddon, J. N., Adelaar, K. A., Djenar, D., & Ewing, M. (2010). *Indonesian: A Comprehensive Grammar* (2nd ed.). Routledge.
- Sooryamoorthy, R. (2020). *Scientometrics for the Humanities and Social Sciences*. Routledge. <https://doi.org/10.4324/9781003110415>
- Talmy, L. (2018). Combinance in the Evolution of Language: Overcoming Limitations. *Cognitive Semantics*, 4(2), 135–183. <https://doi.org/10.1163/23526416-00402001>
- Traugott, E. C. (2019). Whither historical pragmatics? A cognitively-oriented perspective. *Journal of Pragmatics*, 145, 25–30. <https://doi.org/10.1016/j.pragma.2019.01.006>
- Traugott, E. C. (2022). Discourse Structuring Markers in English A historical constructionalist perspective on pragmatics. In *Constructional Approaches to Language* (Vol. 33).
- Traugott, E. C., & Trousdale, G. (2014). Contentful constructionalization. *Journal of Historical Linguistics*, 4(2), 256–283. <https://doi.org/10.1075/jhl.4.2.04tra>
- van Eck, N. J., & Waltman, L. (2023). *VOSviewer* (1.6.20). Universiteit Leiden.
- Van Goethem, K., & Hendriks, I. (2021). Intensifying constructions in second language acquisition: A diasystematic-constructionist approach. In *Constructional Approaches to Language* (Vol. 30). <https://doi.org/10.1075/cal.30.12van>
- Van Goethem, K., & Norde, M. (2020). Extravagant “fake” morphemes in Dutch. Morphological productivity, semantic profiles and categorical flexibility. *Corpus Linguistics and Linguistic Theory*, 16(3), 425–458. <https://doi.org/10.1515/cllt-2020-0024>
- Van Goethem, K., Norde, M., Coussé, E., & Vanderbauwhede, G. (2018). Category change from a constructional perspective: Introduction. In *Constructional Approaches to Language* (Vol. 20). <https://doi.org/10.1075/cal.20.01van>
- van Raan, A. (2019). *Measuring Science: Basic Principles and Application of Advanced Bibliometrics* (pp. 237–280). [https://doi.org/10.1007/978-3-030-02511-3\\_10](https://doi.org/10.1007/978-3-030-02511-3_10)
- Verhaar, J. W. M. (1983). On Indonesian Data. *Linguistic Review*, 3(1), 107–108. <https://doi.org/10.1515/tlir.1983.3.1.107>
- Waltman, L., & van Eck, N. J. (2019). *Field Normalization of Scientometric Indicators* (pp. 281–300). [https://doi.org/10.1007/978-3-030-02511-3\\_11](https://doi.org/10.1007/978-3-030-02511-3_11)